

Fig. 1  
 (PRIOR ART)

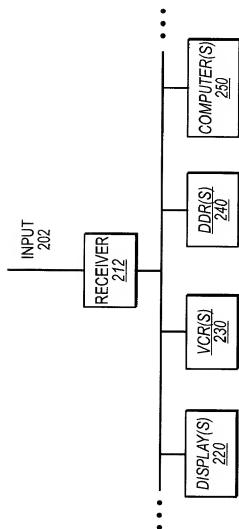


Fig. 2



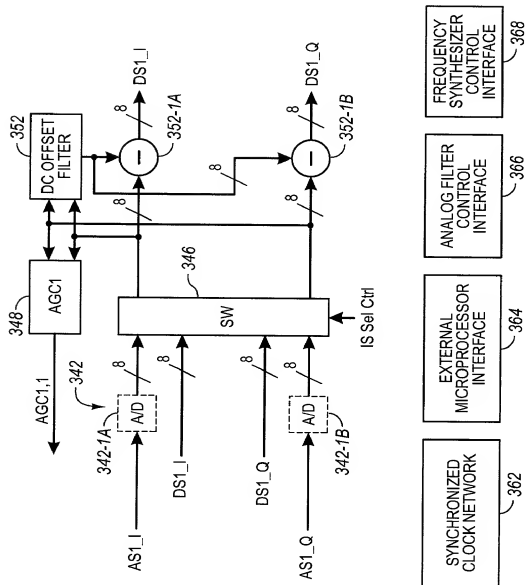


Fig. 3B



**Fig. 3C**

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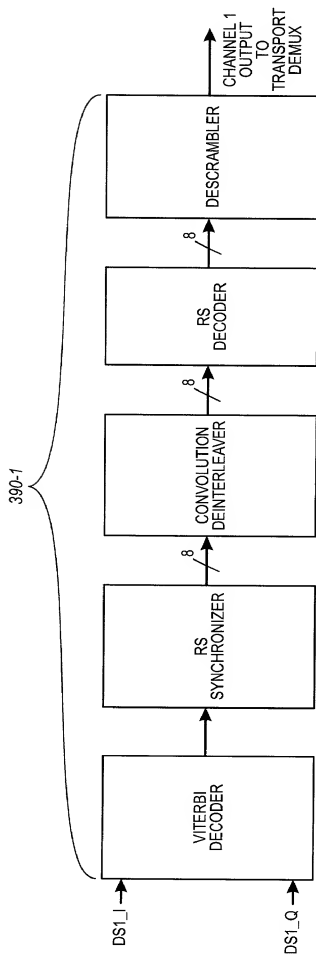


Fig. 3D

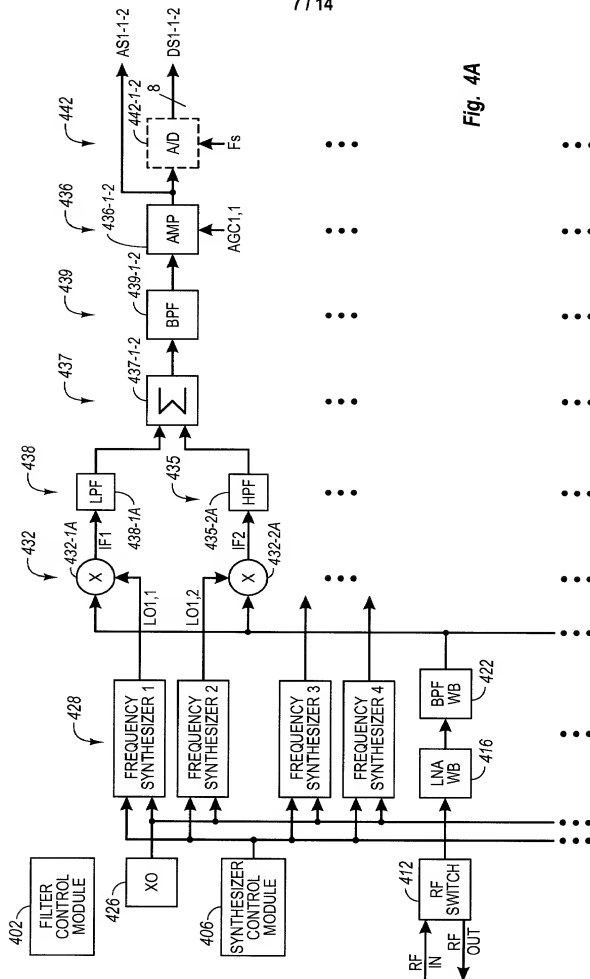


Fig. 4A

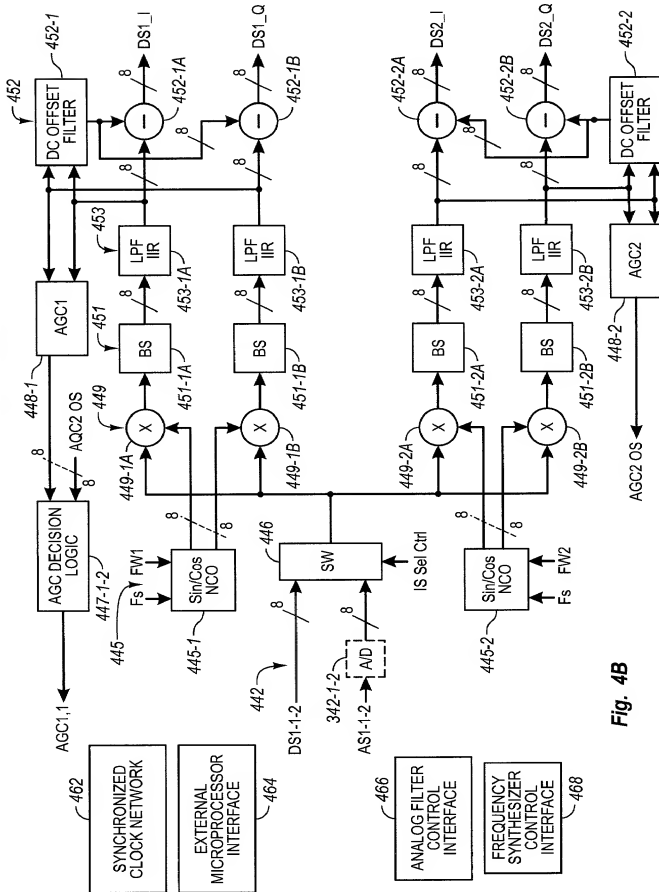


Fig. 4B

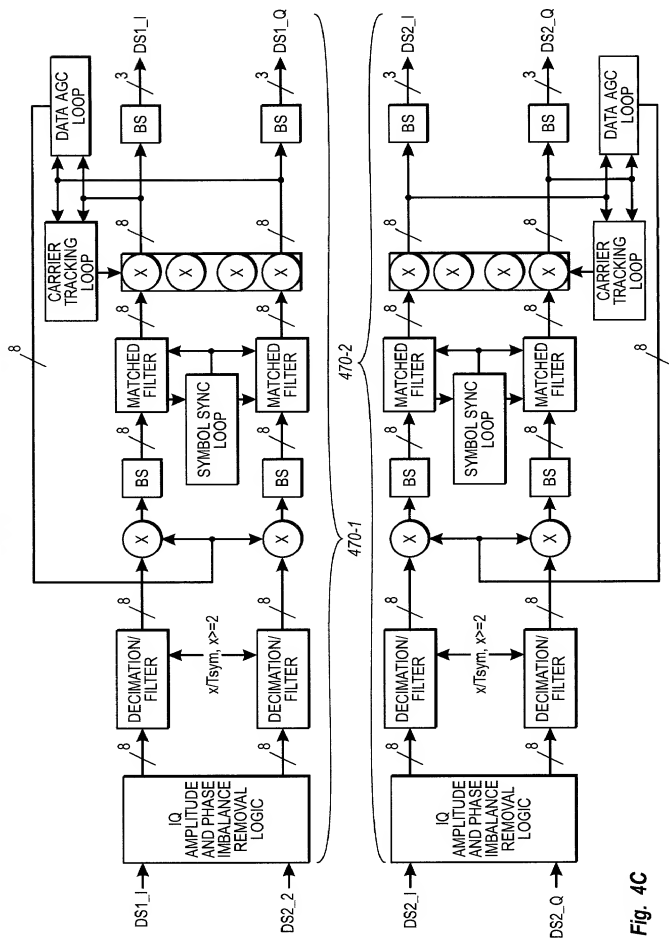


Fig. 4C

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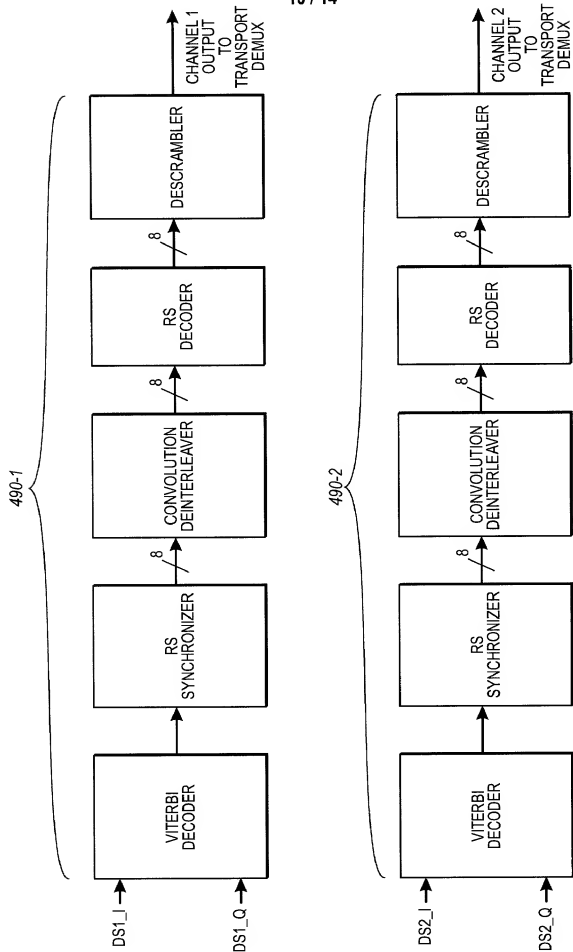


Fig. 4D

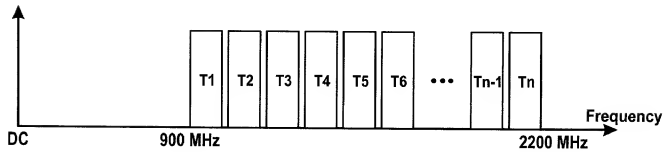


FIG. 5A

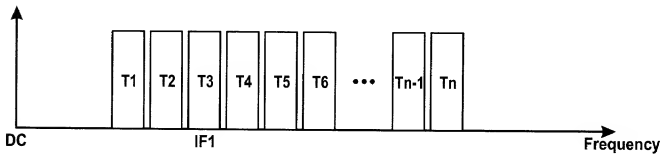


FIG. 5B

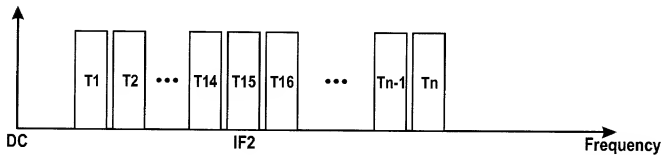


FIG. 5C

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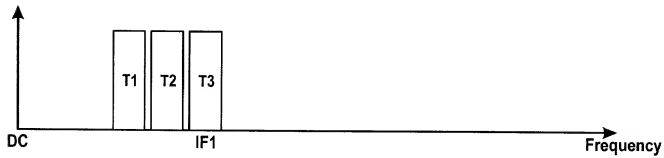


FIG. 5D



FIG. 5E

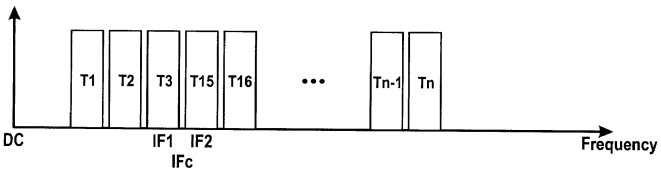


FIG. 5F

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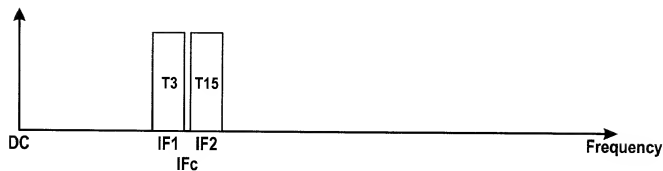


FIG. 5G

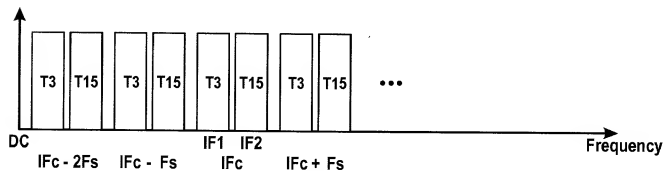


FIG. 5H

0992124-08601  
109280-1272660

Analog Component/Function (8 Independent and Simultaneous Tuners)	Unit Required for IF Sub-sampling (Figs 4A & 4B)	Unit Required for Direct Down Conversion (Figs 3A & 3B)
RF Switch	1 (412)	1 (312)
Low Noise Amp (WB)	1 (416)	1 (316)
XO	1 (426)	1 (326)
Frequency Synthesizer	8 (428)	8 (328)
BPF (WB)	1 (422)	1 (322)
Mixer	8 (432)	16 (332)
Variable (3db Cutoff Freq) LPF	4 (438)	0
Variable (3db Cutoff Freq) HPF	4 (435)	0
Variable (3db BW) BPF	4 (439)	0
Summer	4 (437)	0
Control Amplifier	4 (436)	16 (336)
90 Degree Phase Splitter	0	8 (344)
Analog to Digital Converter	4 (442)	16 (342)
Additional Digital Component/Function		
Multiplier	16 (449)	N/A
NCO (Sin/Cos)	8 (445)	N/A

FIG. 6

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